

DRAFT

### Comparison of Round 2 Report Appendix E Foodweb Model Results for PCBs in Smallmouth Bass with Simple BSAF Calculations

SMB Location	Table 3-28		Table 3-28		Table 3-28		Using Site-wide BSAF		Using Site-wide BSAF Omitting RM 03 Data		Using BSAF Value of 4 from DEQ Guidance	
	PCB Conc in Sediment (ug/kg)	PCB Conc in SMB tissue (ug/kg)	Calculated BSAF	PCB in SMB (ug/kg)	SPAF	BSAF Predicted PCB in SMB (ug/kg)	SPAF	BSAF Predicted PCB in SMB (ug/kg)	SPAF	BSAF Predicted PCB in SMB (ug/kg)	SPAF	
03R014	15.2	788	18	1010	1.3	211	3.7	(-)		176	4.5	(-)
04R023	134	798	2.1	6024	7.5	1861	2.3		1135	1.4	1548	1.9
05R006	25.5	400	5.4	1444	3.6	354	1.1	(-)	216	1.9	(-)	295
06R024	53	278	1.8	2611	9.4	736	2.6		449	1.6	612	2.2
07R009	87.5	490	1.9	4070	8.3	1215	2.5		741	1.5	1011	2.1
08R010	307	3221	3.6	13369	4.2	4265	1.3		2600	1.2	(-)	3548
08R032	73.2	918	4.3	3465	3.8	1017	1.1		620	1.5	(-)	846
09R006	233	878	1.3	10234	11.7	3237	3.7		1973	2.2		2692
Mean			4.8		6.2		2.3			1.6		2.2
Mean without 03R			2.9									
foc	0.018			(from Table 3-5)								
Fish lipid				0.052 (from Table 3-7)								

BSAF = (Ctissue / lipid) / (Csed / foc)

Ctissue = BSAF \* lipid \* Csed / foc

SPAF = species predictive accuracy factor = predicted/actual or actual/predicted [indicated by (-)].

BSAF calculation could be refined using foc for mile segment (rather than average), and lipid content for each composite fish sample (rather than average for all samples).

**DRAFT**  
**Comparison of Appendix E Foodweb Model Results for DDx in Si**  
**with Simple BSAF Calculations**

SMB Location	RM	Mean West			Approx W nearshore		
		Appendix F		Calculated	Figure	Table 3-28?	Table 3-28?
		Table 3-2	totDDT Conc in Sediment			6.1-22	DDE Conc
03R014	3	23	196	3	3	150	
04R023	4	12	203	5.9	3	150	
05R006	5	12	180	5.2	3	110	
06R024	6	34	146	1.5	10	110	
07R009	7	1900	374	0.1	100	180	
08R010	SIL	6.6	96	5.0	3	76	
08R032	8	6.5	181	9.6	30	130	
09R006	9	3.5	178	17.6	3	140	
		mean	6.0		mean		

**foc** 0.018 (from Table 3-5)  
**Fish lipid** 0.052 (from Table 3-7)

$$\text{BSAF} = (\text{Ctissue} / \text{lipid}) / (\text{Csed} / \text{foc})$$

$$\text{Ctissue} = \text{BSAF} * \text{lipid} * \text{Csed} / \text{foc}$$

SPAF = species predictive accuracy factor = predicted/actual or actual/predicted

Really should do the BSAF calculation using foc for mile segment (rather than average), and lipid content each composite fish sample (rather than average for all samples)

## mallmouth Bass

Calculated BSAF	BSAF Value of 4 from DEQ Guidance	BSAF	Predicted	PCB in SMB	(ug/kg)	SPAF	(-)
17		266	0.7				
17.3		139	0.7				
12.7		139	1.3				(-)
3.8		393	2.7				
0.6		21956	58.7				
8.8		76	0.8				
1.5		75	2.4				(-)
16.2		40	0.2				
<b>9.8</b>		mean	<b>8.4</b>				

t for